**DEPARTMENT OF TRANSPORTATION**
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.15

# SOURCE INSPECTION REPORT

**Resident Engineer:** Siegenthaler, Peter
**Address:** 333 Burma Road
**City:** Oakland, CA 94607

**Report No:** SIR-003177
**Date Inspected:** 05-Apr-2011

**Project Name:** SAS Superstructure
**Prime Contractor:** American Bridge/Fluor Enterprises, a JV
**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

**OSM Arrival Time:** 700
**OSM Departure Time:** 1900
**Location:** Changxing Dao, Shangha

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| **Quality Control Contact:** | Don Walton | **Quality Control Present:** | ☑ Yes ☐ No |
| **Material transfer:** | ☐ Yes ☐ No ☑ N/A | **Sampled Items:** | ☐ Yes ☐ No ☑ N/A |
| **Stock Transfer:** | ☐ Yes ☐ No ☑ N/A | **OK to Cut:** | ☐ Yes ☐ No ☑ N/A |
| **Rebar Test Witness:** | ☐ Yes ☐ No ☑ N/A | **Delayed/Cancelled:** | ☐ Yes ☑ No ☐ N/A |
| **Other:** | Coatings Inspection | | |
| **Bridge No:** | 34-0006 | **Component:** | Sub-Assemblies (OBG) and Sub-Assemblies ( |
| **Bid Item:** | 77,78,79 | **Lot No:** | |

**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. Kenneth W. Cason Jr. arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections is to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

Sub-Assemblies (OBG)

Splices (146 Each), NOI Number 6105: In accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives recorded the results of adhesion testing on Splices (146 Each). Readings recorded x4: 8.74 mPa 98% GF, 8.97 mPa 100% C, 5.20 mPa 98% GF and 12.8 mPa 100% C. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Maintenance Traveler Rails TR20-034, TR20-035, 20TR2-36 and 20TR2-37, NOI Number 6107: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Maintenance Traveler Rails TR20-034, TR20-035, 20TR2-36 and 20TR2-37 was tested in accordance with SSPC-SP 1 (Surface Cleanliness). ASTM D4752 (MEK Resistance of Ethyl Silicate (Inorganic) Zinc-Rich Primers by Solvent Rub) was conducted with x2 @ grade 5 and x1 soluble salts reading of 9.6 (µs/cm). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Maintenance Traveler Rails TR20-034 and TR20-035, NOI Number 6107: In preparation for finish coat Interfine

979 Polysiloxane installation and in accordance with project specifications and SSPC-SP 1, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Maintenance Traveler Rails TR20-034 and TR20-035. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to defects (mud cracking) found in the Interzinc 22 undercoat.

Drainage Flumes (44 Each), NOI Number 6108: In preparation for finish coat Interfine 979 Polysiloxane installation and in accordance with project specifications and SSPC-SP 1, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Drainage Flumes (44 Each). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Crash Barriers (6 Each), NOI Number 6109: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Crash Barriers (6 Each). Test results recorded x1 soluble salts reading of 9.4 (µs/cm). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to required weld repairs.

Splices X4068 (52 Each) and X4075 (182 Each), NOI Number 6110: In accordance with project specifications, ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Splices X4068 (52 Each) and X4075 (182 Each) in preparation for blasting operations. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to the presence of oil and grease on substrate.

Drainage Flumes (44 Each), NOI Number 6111: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Drainage Flumes (44 Each) for dry film thickness (DFT) compliance. Finish coating accepted but ABF Quality Assurance personnel instructed ZPMC to re-submit for inspection for DFT compliance of coating on faying surfaces prior to final acceptance.

Maintenance Traveler Rails TR20-034, TR20-035, 20TR2-36, 20TR2-37, 20TR2-38 and 20TR2-44, NOI Number 6112: In preparation for finish coat Interfine 979 Polysiloxane installation and in accordance with project specifications and SSPC-SP 1, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Maintenance Traveler Rails TR20-034, TR20-035, 20TR2-36, 20TR2-37, 20TR2-38 and 20TR2-44. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to defects (mud cracking) found in the Interzinc 22 undercoat.

Stiffeners X4068 (52 Each) and Splices X4075 (182 Each), NOI Number 6113: In accordance with project specifications, ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Stiffeners X4068 (52 Each) and Splices X4075 (182 Each) in preparation for blasting operations. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Bike Path Panel BK4A-059, NOI Number 6114: In accordance with project specifications, ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Bike Path Panel BK4A-059 in preparation for blasting operations. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Maintenance Traveler Rails TR20-034, TR20-035, 20TR2-36, 20TR2-37, 20TR2-38 and 20TR2-44, NOI Number 6115: In preparation for finish coat Interfine 979 Polysiloxane installation and in accordance with project specifications and SSPC-SP 1, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Maintenance Traveler Rails TR20-034, TR20-035, 20TR2-36, 20TR2-37, 20TR2-38 and 20TR2-44. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to defects (holidays) and uncured Interzinc 52 undercoat.

Drainage Flumes (44 Each), NOI Number 6116: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Drainage Flumes (44 Each) for dry film thickness (DFT) compliance. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to defects (holidays) found in coating on faying surfaces.

Sub-Assemblies (Tower)

Hand Rails (14 Each), NOI Number T2027: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Hand Rails (14 Each). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Office

This Quality Assurance Inspector (QA) reviewed, recorded and entered data from notice of inspection requests for the purpose of tracking and compliance to contract documents.

Note: Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

**Summary of Conversations:**

**Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

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| **Inspected By:** | Cason,Kenneth | Quality Assurance Inspector |
| **Reviewed By:** | Miller,Mark | QA Reviewer |